35 Years of the

COMMONWEALTH GRADUATE ENGINEERING PROGRAM (CGEP)

Why CGEP?

CGEP provides innovative services for Virginians to advance their skills while working full-time. Partnering with education, government, and private industry, CGEP helps assure the future of Virginia by operating as an independent service provider for the citizens of the state.

CGEP Unique Value Proposition

CGEP's primary focus has always been on advancing the education and career of the working engineer. The program shortens the time needed to attain a degree through course sharing among partner universities.

Offering courses through an online delivery mode that makes education available wherever the student works, CGEP is used as a recruitment tool for industries and has always been responsive to emerging technological needs. It has been crucial in building a stronger scientific and engineering workforce within the state.

01. Students - utilizing locations like SVHEC and Dahlgren will allow the consortium to keep an unbiased approach to meeting the needs of the commonwealth and the students.

02. Growth - marketing to provide greater visibility for students and new industries; streamlining the message and becoming more intentional in data collection.

03. Offerings - becoming more strategic in CGEP's structure to help meet the growing demand of Virginia's industries.

CGEP Investment

CGEP is supported by the Commonwealth’s legacy funding. Individual universities within CGEP have covered any shortfalls by investing resources to cover the gap between legacy funding and inflation. Together, partner universities helped share costs to update the website and ongoing rebranding efforts. Industry partners like Micron have supported CGEP with workshops that promoted strategies for online learning geared toward engineering. Funding from Micron seeded the online course development initiatives. CGEP also received funding from the National Science Foundation (NSF) via a grant for the Virginia Partnership for Nanotechnology Education and Workforce Development. The grant helped expand degrees by utilizing the CGEP model to offer courses for students, expediting the time needed to complete degrees.
In collaboration with CGEP and Virginia Tech, Virginia State University (VSU) now offers an accelerated degree for Industrial and Systems Engineering, enabling VSU undergraduates to start contributing to their Virginia Tech graduate degree before completing their BS at VSU. Students can count up to 9 course credit hours toward their undergraduate and graduate degree using the CGEP model. CGEP is committed to supporting the tech-talent pipeline in graduate degrees and non-credit opportunities for baccalaureate students by centralizing services, marketing the program, and focusing on individual student needs and state needs with increased funding.

CGEP understands that student matriculation data is invaluable going forward, and with investments from the state, the consortium will centralize operation with a program manager located in the Southern Virginia Higher Education Center, streamlining data collection and reporting.

Promising Measure

Enrollment Data
Industry

“CGEP has been a great asset to Naval Surface Warfare Center Dahlgren Division for many years. CGEP’s graduate engineering programs at the UMW Dahlgren campus keep our employees on the job as they earn their advanced degrees, and allow them to tailor their curriculum to include specialized courses from all the member universities. As our mission and employee base in Dahlgren grows, we’ll look even more to CGEP to meet our needs for advanced degrees in new and evolving scientific and engineering disciplines.” (Naval Surface Warfare Center Dahlgren Division)

“The partnership of top tier universities in CGEP and the unique ability for students to take pertinent classes across the membership provides a great opportunity to our engineers. This creates an avenue of personal development to aid in attracting and retaining engineering workforce in Virginia.”

“My involvement with the CGEP includes pursuing a Master of Engineering in Electrical Engineering from The University of Virginia and a Master of Engineering Management from Old Dominion University while working at Babcock & Wilcox (now BWX technologies) in Lynchburg. Along with completing the required courses for each degree, I was able to develop a program of study that fit my specific career interests in manufacturing automation. In earning the two degrees, I was able to include courses from UVA, Virginia Tech, ODU, and VCU in a variety of disciplines: Electrical Engineering, Mechanical Engineering, Systems Engineering, Computer Science, Industrial Engineering, Statistics, and Engineering Management. Access to such a diverse collection of courses would not have been possible through a single university and limited transfer credits. Although I could take credit for making all this happen, it was made possible thanks to the people associated with the program and the universities that I have had the pleasure of knowing over the years and who contributed to the success of my studies.” (Bill Pfister)
Sample CGEP Testimonials

Industry and Students

“Through the Commonwealth Graduate Engineering Program, I earned my Master’s Degree in Engineering from ODU in 1994, while working full-time for Wiley|Wilson in Lynchburg, VA. Earning an advanced degree offered numerous benefits — for myself and my firm. But like other full-time professionals, I faced the unique challenge of working in one location yet pursuing an advanced degree from a college in another location. The CGEP closed that gap. Without this program and its distance learning technologies, connected faculty, and network of other working engineers, earning an advanced degree would have been near impossible. In the architecture-engineering industry, a Master’s degree not only offers students information about more complex technical topics, but it also provides education about project management skills and different managerial philosophies. Earning this degree while working full-time gave me the opportunity to apply the abstract concepts I was learning to real-life projects I was already working on. I gained a more complete understanding of the engineering field and that has undoubtedly contributed to my growth in the firm. As Chief Operating Officer, I credit the CGEP for playing a central role in my career advancement. The benefits of this program can’t be overstated.” (NEIL E. MCSWEENEY, PE, Chief Operating Officer)

“A historical higher-education innovator, CGEP continues to build on its legacy of broadening the opportunities for graduate education in the STEM fields. By efficiently delivering access in every corner of the Commonwealth, the student pipeline is increased and employers have a deeper pool of talent from which to draw. CGEP efficiently delivers quality education in a flexible format to meet the needs of today’s businesses. As a consulting firm focused on building capacity in rural Virginia, the RiverLink Group values the opportunity to share the CGEP story with our business and education clients.” (Liz Povar, Principal, The RiverLink Group)

Emerging Offerings

Industry

Micron, Rolls Royce and Newport News Shipbuilding (current partners); customizing courses to create industry-specific credentials

Tech-Talent Pipeline

Generating graduate degrees to meet the needs of the tech talent pipeline; creating non-credit opportunities for post-bachelor students

Partnerships

Growing more partnerships like VSU to help meet the growing demand of industry and state needs
Dear Colleague,

George Mason University (GMU), Old Dominion University (ODU), University of Virginia (UVA), Virginia Commonwealth University (VCU), Virginia State University (VSU) and Virginia Tech (VT) constitute a statewide initiative, collectively referred to as the Commonwealth Graduate Engineering Program (CGEP). For over 35 years our respective institutions, have been committed to providing the best education possible for practicing engineers in the Commonwealth. Beginning in the early 1980’s, they pioneered an offering of degree programs using distance technology so Virginia’s engineers and scientists could be assured an opportunity to earn an advanced degree no matter where they lived and worked. This collaborative effort has served thousands of engineers in a variety of disciplines and has pushed the envelope of what we now know as online and hybrid education. Collectively, they have been able to provide unique, flexible, accessible, and relevant professional learning pathways that are core to advancing the technological pipeline and economic development of the Commonwealth.

Garnering support of past governors, CGEP has continuously recognized and adapted their programs to changes in technology, workforce demand, and the corporate/business needs of the Commonwealth. CGEP is now at another transition point critical to the program and the future of Virginia’s engineering education. Remaining true to their vision, we believe in these ongoing efforts to adapt and respond, collectively. CGEP has been critical in moving forward engineering education opportunities for the Commonwealth in ways that no individual university could.

Changes such as what CGEP is envisioning will continue to position the consortium to support the increased demand for graduate degree programs, certificates, and innovative pathways for learners in emerging areas. To this end, we support CGEP’s vision of offering centralized support to students and its partner universities. We believe it will allow CGEP to more effectively meet the growing technology, computing, and engineering education needs of the Commonwealth of Virginia.

Kenneth Ball,
Dean, GMU Volgenau School of Engineering

Stephanie Adams,
Dean, ODU Batten College of Engineering & Technology

Barbara D. Boyan,
Dean, VCU College of Engineering

Craig H. Beason,
Dean, UVA School of Engineering and Applied Science

Dawit Haile,
Interim Dean, VSU College of Engineering and Technology

Julia M. Ross,
Dean, VT College of Engineering
Commonwealth Graduate Engineering Program (CGEP)  
35 Years of Innovation  
May 20, 2019

Dr. Glenda R. Scales, Virginia Tech  
Bob Bailey, Center for Advancement of Engineering Research
CGEP Unique Value Proposition

**Students**
- Stay in your job
- Shorten time to degree
- Available wherever the student works

**Industry**
- Recruit new employees
- Respond to industry needs
- Strengthens workforce

**Commonwealth of Virginia**
- Differentiates Virginia
- Resource for Virginia Economic Development Partnership
- 35 years of innovation
The CGEP Consortium

Dr. Glenda Scales  
State Chair

Dr. Gregory Triplett

Dr. Shannon Barker

Dr. Daniel Garrison

Dr. Anthony Dean

Interim Dean  
Dawit Haile
## Legacy CGEP Degree Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>VT</th>
<th>UVA</th>
<th>GMU</th>
<th>ODU</th>
<th>VCU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Engineering</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>VT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer Engineering</td>
<td>VT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer Science</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>VT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Engineering</td>
<td>VT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial Engineering</td>
<td>VT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modeling and Simulation Engineering</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material Science and Engineering</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical and Aerospace Engineering</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systems Engineering</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CGEP Enrollments

- 2014-2015
- 2013-2014
- 2012-2013
- 2011-2012
- 2010-2011
- 2009-2010
- 2008-2009
- 2007-2008
## CGEP Annual Appropriation

<table>
<thead>
<tr>
<th>CGEP Partners</th>
<th>General Fund</th>
<th>Non-General Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>George Mason Univ.</td>
<td>$289,614</td>
<td>$124,120</td>
</tr>
<tr>
<td>Old Dominion Univ.</td>
<td>$431,013</td>
<td>$198,244</td>
</tr>
<tr>
<td>Univ. of Virginia</td>
<td>$527,610</td>
<td>$468,850</td>
</tr>
<tr>
<td><strong>Center for Advanced Engineering and Research (CAER)</strong></td>
<td>($110,583)</td>
<td></td>
</tr>
<tr>
<td>Virginia Commonwealth Univ.</td>
<td>$332,140</td>
<td>$168,533</td>
</tr>
<tr>
<td>Virginia Tech</td>
<td>$869,882</td>
<td>$436,357</td>
</tr>
<tr>
<td>Univ. of Mary Washington Dahlgren Campus</td>
<td>$80,483</td>
<td>$36,130</td>
</tr>
<tr>
<td><strong>Southern Virginia Higher Education Center</strong></td>
<td>$29,050</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$2,559,792</td>
<td>$1,432,234</td>
</tr>
</tbody>
</table>

- From the allocation of funds to UVA, $110,583 historically and continues to be paid to the Center for Advanced Engineering and Research (CAER) in Lynchburg. From the start of CGEP, UVA has served as the fiscal agent for CGEP operations in Lynchburg. The state provides money to UVA with the expectation that a some of it will pass through to support CGEP operations in Lynchburg.
- In the state budget, CGEP is referred to as “the educational telecommunications project to provide graduate engineering education.” The words of that phrase can be used to find the CGEP appropriations in the budget bill.
# Supply and Demand—Virginia Career Works

*(showing only unmet demand, adapted from Virginia Career Works)*

<table>
<thead>
<tr>
<th>Industry sector</th>
<th>Unique postings (annual)</th>
<th>Graduates</th>
<th>Projected openings (annual)</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Planning and Analysis</td>
<td>18,348</td>
<td>8,496</td>
<td>7,697</td>
<td>Northern Virginia and Capital</td>
</tr>
<tr>
<td>Construction and Architecture</td>
<td>1,912</td>
<td>267</td>
<td>2,360</td>
<td>Northern Virginia and Hampton Roads</td>
</tr>
<tr>
<td>Energy and Environment</td>
<td>1,881</td>
<td>464</td>
<td>3,016</td>
<td>Northern Virginia</td>
</tr>
<tr>
<td>Transportation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering</td>
<td>4,482</td>
<td>2,911</td>
<td>2,540</td>
<td>Northern Virginia</td>
</tr>
<tr>
<td>Manufacturing and Production</td>
<td>1,508</td>
<td>652</td>
<td>1,406</td>
<td>Northern Virginia and New River</td>
</tr>
<tr>
<td>Healthcare STEM (excluding Nursing)</td>
<td>36,261</td>
<td>10,290</td>
<td>6,359</td>
<td>Entire State</td>
</tr>
<tr>
<td>Industry demand</td>
<td>66,261</td>
<td>23,674</td>
<td>24,684</td>
<td></td>
</tr>
</tbody>
</table>

**Demand unmet** 64.3%  

*Computers and IT exceeds demand 101.2%.*
Opportunity – Expand Our Impact

- Streamline the student experience
- Expand the marketing and outreach
- Expand offerings to meet emerging needs
- Growth increases further with Amazon

Engineering Employment in Virginia 2017 - 2024
Source: www.bls.gov
Leadership and Innovation – 1983 to Now

1983-1984
Broadcasted classes from university to university

1986 – 1990
Expanded to receive sites across the state

1994 – 2006
Adopted new broadcast technologies

2011
Implemented online delivery platform

2012 – 2014
Offered synchronous and asynchronous delivery modes

2014 – 2018
Expanded courses, degrees offerings and partners

2019 +
Innovation & Leadership

Innovation (Technology)

Growth

Adaptation

Leadership (Platform)

Transition

Expansion
Enrollments and Resources

- Enrollments are trending upward

- CGEP funding reach is decreasing, in both:
  - real dollars
  - adjusted dollars
## Current CGEP Degree Programs

<table>
<thead>
<tr>
<th>VT</th>
<th>UVA</th>
<th>GNU</th>
<th>CEU</th>
<th>VCU</th>
<th>VSU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace Engineering</td>
<td><img src="image1" alt="VT Engineering" /></td>
<td><img src="image2" alt="University of Virginia" /></td>
<td><img src="image3" alt="Old Dominion University" /></td>
<td><img src="image4" alt="VCU College of Engineering" /></td>
<td><img src="image5" alt="VSU" /></td>
</tr>
<tr>
<td>Applied Information Technology (Cyber)</td>
<td><img src="image1" alt="VT Engineering" /></td>
<td><img src="image6" alt="George Mason University" /></td>
<td><img src="image3" alt="Old Dominion University" /></td>
<td><img src="image4" alt="VCU College of Engineering" /></td>
<td><img src="image5" alt="VSU" /></td>
</tr>
<tr>
<td>Chemical Engineering</td>
<td><img src="image2" alt="University of Virginia" /></td>
<td><img src="image2" alt="University of Virginia" /></td>
<td><img src="image3" alt="Old Dominion University" /></td>
<td><img src="image4" alt="VCU College of Engineering" /></td>
<td><img src="image5" alt="VSU" /></td>
</tr>
<tr>
<td>Civil Engineering</td>
<td><img src="image2" alt="University of Virginia" /></td>
<td><img src="image2" alt="University of Virginia" /></td>
<td><img src="image3" alt="Old Dominion University" /></td>
<td><img src="image4" alt="VCU College of Engineering" /></td>
<td><img src="image5" alt="VSU" /></td>
</tr>
<tr>
<td>Computer Engineering</td>
<td><img src="image1" alt="VT Engineering" /></td>
<td><img src="image2" alt="University of Virginia" /></td>
<td><img src="image3" alt="Old Dominion University" /></td>
<td><img src="image4" alt="VCU College of Engineering" /></td>
<td><img src="image5" alt="VSU" /></td>
</tr>
<tr>
<td>Computer Science</td>
<td><img src="image2" alt="University of Virginia" /></td>
<td><img src="image3" alt="Old Dominion University" /></td>
<td><img src="image4" alt="VCU College of Engineering" /></td>
<td><img src="image5" alt="VSU" /></td>
<td></td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td><img src="image1" alt="VT Engineering" /></td>
<td><img src="image2" alt="University of Virginia" /></td>
<td><img src="image3" alt="Old Dominion University" /></td>
<td><img src="image4" alt="VCU College of Engineering" /></td>
<td><img src="image5" alt="VSU" /></td>
</tr>
<tr>
<td>Engineering Management</td>
<td><img src="image2" alt="University of Virginia" /></td>
<td><img src="image3" alt="Old Dominion University" /></td>
<td><img src="image4" alt="VCU College of Engineering" /></td>
<td><img src="image5" alt="VSU" /></td>
<td></td>
</tr>
<tr>
<td>Environmental Engineering</td>
<td><img src="image1" alt="VT Engineering" /></td>
<td><img src="image2" alt="University of Virginia" /></td>
<td><img src="image3" alt="Old Dominion University" /></td>
<td><img src="image4" alt="VCU College of Engineering" /></td>
<td><img src="image5" alt="VSU" /></td>
</tr>
<tr>
<td>Industrial Engineering</td>
<td><img src="image2" alt="University of Virginia" /></td>
<td><img src="image3" alt="Old Dominion University" /></td>
<td><img src="image4" alt="VCU College of Engineering" /></td>
<td><img src="image5" alt="VSU" /></td>
<td></td>
</tr>
<tr>
<td>Modeling and Simulation Engineering</td>
<td><img src="image2" alt="University of Virginia" /></td>
<td><img src="image3" alt="Old Dominion University" /></td>
<td><img src="image4" alt="VCU College of Engineering" /></td>
<td><img src="image5" alt="VSU" /></td>
<td></td>
</tr>
<tr>
<td>Material Science and Engineering</td>
<td><img src="image2" alt="University of Virginia" /></td>
<td><img src="image3" alt="Old Dominion University" /></td>
<td><img src="image4" alt="VCU College of Engineering" /></td>
<td><img src="image5" alt="VSU" /></td>
<td></td>
</tr>
<tr>
<td>Mechanical and Aerospace Engineering</td>
<td><img src="image2" alt="University of Virginia" /></td>
<td><img src="image3" alt="Old Dominion University" /></td>
<td><img src="image4" alt="VCU College of Engineering" /></td>
<td><img src="image5" alt="VSU" /></td>
<td></td>
</tr>
<tr>
<td>Systems Engineering</td>
<td><img src="image1" alt="VT Engineering" /></td>
<td><img src="image6" alt="George Mason University" /></td>
<td><img src="image3" alt="Old Dominion University" /></td>
<td><img src="image4" alt="VCU College of Engineering" /></td>
<td><img src="image5" alt="VSU" /></td>
</tr>
<tr>
<td>Telecommunications</td>
<td><img src="image6" alt="George Mason University" /></td>
<td><img src="image3" alt="Old Dominion University" /></td>
<td><img src="image4" alt="VCU College of Engineering" /></td>
<td><img src="image5" alt="VSU" /></td>
<td></td>
</tr>
<tr>
<td>Certificate: Coastal Engineering</td>
<td><img src="image3" alt="Old Dominion University" /></td>
<td><img src="image4" alt="VCU College of Engineering" /></td>
<td><img src="image5" alt="VSU" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certificate: Systems Engineering</td>
<td><img src="image6" alt="George Mason University" /></td>
<td><img src="image3" alt="Old Dominion University" /></td>
<td><img src="image4" alt="VCU College of Engineering" /></td>
<td><img src="image5" alt="VSU" /></td>
<td></td>
</tr>
</tbody>
</table>
Legacy CGEP Structure

Centralized Services

CGEP University Deans

CGEP Directors

Rotating State Chair

CGEP Administrators

CGEP Advisory Board

Receive Site: CAER

Receive Site: UMW

Receive Site: SVHEC

Other sites

Network Partners Organizations

Centralized Services

Network Partners Committed Industry
Leadership through Innovation

Developing

Engineering Career Pathways

Expand Offerings

Improve the student experience

Rebranding & Marketing

Evaluation and Assessment

CGEP

On-line Degree and Course Development

University Collaboration to Produce MS Graduates
Funding Summary
Existing and New

New
$1,360,367

Existing
$110,583
CAER
Reallocation

1.5 million
Total

SVHEC
$29,050
Existing
## Centralized Services

<table>
<thead>
<tr>
<th>Activity</th>
<th>Proposed Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve Student Experience</td>
<td>$685,000</td>
</tr>
<tr>
<td>Outreach and Marketing</td>
<td>$300,000</td>
</tr>
<tr>
<td>Evaluation and Assessment</td>
<td>$105,000</td>
</tr>
<tr>
<td>Expand Offerings, Technology</td>
<td>$417,000</td>
</tr>
<tr>
<td>Alternative Credentials</td>
<td></td>
</tr>
<tr>
<td>Engineering Career Pathways</td>
<td></td>
</tr>
</tbody>
</table>

Future request based on pilot results

Seeking Go Virginia Funds
Improve the Student Experience

CGEP Initiative
- Develop a common approach to multiple university processes for the recruitment, enrollment and retentions of CGEP learners

Strategy
- Leverage a shared common support organization to provide common support services

Tactics
- Common front-end enrollment process
- “One stop shopping” approach to providing a shared student support services
- Academic and Career Advising
- Marketing and Outreach – manage CGEP Web services

Resources
- $685,000
- Support services for admissions, enrollment, student success coaches, career coaches
Expand Awareness of CGEP Programs and Services

**CGEP Initiative**
- Expand awareness of the program and its benefits

**Strategy**
- Develop and implement a shared common marketing and outreach program

**Tactics**
- Rebranding
- Develop and implement targeted marketing efforts that promote enrollment
- Develop and implement targeted marketing efforts that promote careers

**Resources**
- $300,000
- Implement rebranding and marketing services
Strong Program Evaluation

Opportunity
• Develop common reporting metrics across multiple universities

Initiative
• Leverage a shared centralized support organization to conduct regular program evaluation

Tactics
• Defined data tracking, collection, and analysis
• Defined centralized and common evaluation process
• Common formative and summative outcomes

Resources
• $105,000
• Consultant, evaluation services
**Expand Offerings Available through CGEP**

<table>
<thead>
<tr>
<th>CGEP Initiative</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Expand offerings to meet emerging needs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Leverage expanded industry partnerships to identify and develop new and alternative engineering offerings</td>
</tr>
<tr>
<td>• Integrate CGEP into engineering career pathways</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tactics</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Consult with industry and government partners to Identify and prioritize with CGEP universities offering new industry certificates or alternate credentials</td>
</tr>
<tr>
<td>• Partner with Virginia undergraduate programs to use CGEP courses to assist with implementing accelerated B.S. to M.S programs</td>
</tr>
<tr>
<td>• Explore partnering with Online Virginia Network</td>
</tr>
<tr>
<td>• VCCS – community college to B.S.</td>
</tr>
<tr>
<td>• Explore offering senior level UG courses via CGEP to target UG students participating in Work Based Learning programs (internships and co-ops)</td>
</tr>
<tr>
<td>• Learning Communities – professional societies professional development</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>• $417,000</td>
</tr>
<tr>
<td>• New technology and partnership initiatives</td>
</tr>
</tbody>
</table>
CGEP Supports Virginia Higher Education Plan

Access for All
• Expand on-line courses & degrees
• Expand types of alternative offerings

Student Success
• Allows students to customize their degree program
• Shorten time to degree

Innovation
• Improved program evaluation and assessment
• Alternative Credentials

Prosperity
• Engineering Career Pathways
• Stronger scientific and engineering workforce
Meet Bill; a two time CGEP graduate

“In earning the two degrees, I was able to include courses from UVA, Virginia Tech, ODU and VCU in a variety of disciplines. Access to such a diverse collection of courses would not have been possible through a single University and limited transfer credits.” (Bill Pfister, BWXT)
Meet Zuzana Steen and Butch Brenton

**Zuzana Steen** - Micron Technology, Inc. Academic and Community Relations Manager

**Butch Brenton** - Newport News Shipbuilding, (a division of Huntington Ingalls Industries.) Engineer 4, Emerging Technologies and University Relations

**Industry Opportunity** - To quickly provide a collection of courses in the field of Data Analytics to build industry offered certificates.

Will the Commonwealth be competitive enough to meet their need?
CGEP Existing ADVISORY BOARD

In discussions with and pursuing: Microsoft, Amazon
Thank you!

Dr. Glenda Scales
gscales@vt.edu
540.231.9754

www.cgep.virginia.gov

Education From the Sky:
The Commonwealth Graduate Engineering Program Promotional Video

https://youtu.be/0hyLdGT IbUw